ID 114

Exploring the user satisfaction of agricultural mobile application with special reference to "Govi-Nena" mobile app

M.G.T. Lakmali[1*], P.V.S. Harshana[1], G.C. Samaraweera[1], W.A. Indika[2] and M.K.D.K. Piyaratne[3]

[1]Department of Agricultural Economics, Faculty of Agriculture, University of Ruhuna, Sri Lanka
[2]Department of Computer Science, Faculty of Science, University of Ruhuna, Sri Lanka
[3]Computer Unit, Faculty of Agriculture, University of Ruhuna, Sri Lanka

Abstract
Despite the availability of a significant number of mobile applications, stakeholders in the agriculture domain have not been able to achieve their goals as expected due to the shortcomings of such information platforms available in Sri Lanka. Even though user satisfaction reflects the success of such apps, insufficient exploration regarding it triggers this problem. Therefore, this study aimed to evaluate the user satisfaction of an agricultural mobile-based application with special reference to the "Govi-Nena" agricultural mobile application, which provides information for Sri Lankan commercial farmers that will be useful to make quality decisions for successful farming. A group of "Govi-Nena" mobile app users was considered as the target population (n=276) and data were collected using a Google form-based structured questionnaire with a response rate of 30% (n=83). Based on previous research, the major elements of the study were identified as general user impression, screen content, terminology and communication with the system, system capabilities, and ease of learning. Relationships between constructs considered in this study were tested applying Structural Equation Modeling (SEM) using the Partial Least Squares (PLS) method. According to the results, the majority (87%) of the users were using the "Govi-Nena" mobile app for agricultural purposes while others were using it for academic and learning purposes. Findings further revealed that there was a statistically significant relationship between users' general impression of the system and user satisfaction of the "Govi-Nena" agricultural mobile app (t= 2.080; p=0.038). Further, a statistically significant relationship was observed between screen content and user satisfaction of the app (t= 8.273; p=0.000). However, the impact of ease of learning (t=0.218; p=0.828), system capabilities (t=1.270; p=0.205), terminology, and communication of the system (t=0.671; p=0.503) on the user satisfaction of the "Govi-Nena" agricultural mobile app were statistically not significant. Hence, the present study suggests that administers' apparent effort is required to develop the application in a more user-friendly way through sufficient and accurate information, user-preferred screen design, suitable general and overall reaction of the system, and proper screen sequence. The results of this research would be of a great significance for administers of common agricultural apps to introduce user-demanded improvements for the system while ensuring higher satisfaction for the users of agricultural apps.

*Corresponding Author: thushlakmali95@gmail.com